

REMARKS/ARGUMENTS

Responsive to the Official Action mailed May 2, 2007, applicants have revised the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, independent claims 1 and 18, and dependent claims 2-4, 6-8, 10-16, and 19 have been amended, and new independent claim 20, and new dependent claims 21-33 added. Reconsideration is respectfully requested.

Applicants note the Examiner's helpful comments regarding the suggested guidelines for the application specification, and applicants are endeavoring to secure an electronic version of their application to facilitate the suggested revisions.

In the Action, the Examiner noted several objections to the pending claims, and applicants have revised the claims accordingly. It will be noted that the revisions to claim 1 now provide the proper antecedent basis for "the spacer substrate" recited in dependent claims 9 and 10.

In rejecting the pending claims under 35 U.S.C. §102 and §103, the Examiner has relied upon U.S. Patent Publication No. 2004/0012698, to Suda et al., and U.S. Patent No. 6,072,634, to Broome et al. However, as set forth in the amended claims, applicants' novel camera device is believed to be patentably distinct from these references, even if combined, and accordingly, the Examiner's rejections are respectfully traversed.

As set forth in amended claims 1 and 18, it is respectfully submitted that the present invention is clearly patentably distinct from the Suda et al. reference, in that these claims specify that the recited spacer substrate is adhered to the image capturing element by means of one or more adhesive layers, and that the lens substrate is also adhered to the spacer

substrate by means of the adhesive layer. As disclosed, spacer substrate 105 is imbedded between image capturing element 103 and the lens substrate 109 by means of adhesive layers 113, 115, and 117.

Such a specific instruction for a camera device is neither taught nor suggested in the Suda et al. reference. In significant distinction, Suda et al. contemplates, such as discussed at paragraph [0243], page 13, that:

For fixing the spacer 522 to the semiconductor chip 503, there may be applied an adhering step in producing a SOI (silicon on insulator) substrate.

Bonding in this fashion is *totally different* from bonding through the use of an adhesive layer, as recited in claim 1. Clearly, such an adhesive layer is absent from the structure contemplated by the Suda et al. reference. Such a method as contemplated by Suda et al. must take place at high temperatures, for example, at least 400 degrees Celsius. It is readily apparent to those skilled in the art that the spacer substrate and/or lens substrate, according to the present invention, cannot withstand such high temperatures. In addition, the targeted imaging applications require very accurate (micron level) mutual position accuracies of all optical and sensor layers involved. This can only be achieved applying cold temperature adhesion systems, such as UV curable resins. Any other thermal adhesive system will cause fatal positional errors as a result of differences in Coefficient of Thermal Expansions of the different materials involved". Therefore, it is respectfully submitted that it is improper to conclude that the method of bonding according to Suda et al. is equivalent to the method according to the present invention, i.e., bonding by using an adhesive.

Therefore, amended claims 1 and 18 are clearly both novel and non-obvious in light of the specific and limited teachings of the Suda et al. reference.

By the present amendment, applicants have added new independent claim 20 directed to the novel camera device of their invention. The configuration of the present invention, as set forth in claim 20, is in accordance with the embodiment of Figure 2.

As set forth in claim 20, the camera device according to the present invention is specified as further including a spacer substrate adhered to an image capturing element by means of an adhesive layer, wherein a second lens substrate for carrying a second lens element is stacked on the first lens substrate aligned along the main optical axis through the second lens element, first lens element, spacer substrate, and the image capturing element (see paragraph [0051]).

It is respectfully maintained that the Suda et al. reference does not disclose a construction for a camera device comprising an optical system of *at least two lens elements*. An advantage of such a two lens optical system is that a relatively strong lens function is obtained, without excessive aberrations. It is respectfully maintained that there is no teaching or suggestion in Suda et al. that such a camera device provides beneficial results. Therefore, it is respectfully maintained that claim 20 is also patentably distinct from the teachings of the Suda et al. publication.

New Claims 21-33, which depend from claim 20, have been added to specify additional features of the present invention.

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Applicants note the Examiner's further reliance upon the Broome et al. patent, but it is respectfully maintained that this reference does not overcome the clear deficiencies in the teachings of the principle Suda et al. reference.

In view of the foregoing, formal allowance of claims 1-4, 6-8, 10-16, and 18-33 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicants' attorneys, they may be reached at the number indicated below.

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **August 2, 2007**.

